

**WHAT IS CLAIMED IS:**

- 1) An improved blending tool for rotation in a blending machine, comprising:
  - (a) a center shank;
  - (b) a collision surface having a collision profile; and
  - (c) a connector mechanism connecting the collision surface to the center shank, said connector mechanism being capable of connecting the collision surface to the center shank in different positions such that the collision profile of the collision surface varies with different positions of connection.
- 2) The blending tool of **claim 1** wherein the connector mechanism is an articulator hinge.
- 3) The blending tool of **claim 1** wherein the position of the collision surface in relation to the center shank is rigidly fixed during rotation of the tool.
- 4) The blending tool of **claim 1**, wherein the collision surface comprises a collision plate spaced apart from the center shank.
- 5) The blending tool of **claim 4**,
  - (a) wherein the center shank has a first and second end; and
  - (b) further comprising at least one collision plate positioned in proximity to each end.
- 6) The blending tool of **claim 4**, further comprising at least one arm having a first and second end wherein the first end of the arm is connected to the center shank and the second end is connected to the collision plate.

7) The blending tool of **claim 1**, wherein the connector mechanism comprises a fastener that can be unfastened for disconnecting the collision surface from the center shank.

8) The blending tool of **claim 6**, further comprising a fastener proximate to the first end of the arm, said fastener being capable of unfastening for disconnection of the arm and the collision plate from the center shank.

9) The blending tool of **claim 1**, wherein the connector mechanism further comprises a mechanism for rigidly fixing the position of the collision surface in one of a plurality of preset positions.

10) The blending tool of **claim 9**, further comprising:

(a) at least one arm having a first and second end wherein the first end is connected to the center shank and the second end is connected to the collision surface and wherein the arm has a plurality of through holes;

(b) a central hub having a plurality of pre-set positional holes; and

(c) a bolt for rigidly holding the arm in positional relationship to the central hub when said bolt is inserted through the hole in the arm and into an aligned positional hole on the central hub.

- 11) A blending machine, comprising:
- (a) a vessel for holding the media to be blended;
  - (b) a blending tool mounted inside the vessel, said blending tool comprising a center shank, a collision surface having a collision profile, and a connector mechanism connecting the collision surface to the center shank, said connector mechanism being capable of connecting the collision surface to the center shank in different positions such that the collision profile of the collision surface varies with different positions of connection; and
  - (c) a rotatable drive shaft, connected to the blending tool inside of the vessel, for transmitting rotational motion to the blending tool.
- 13) The blending machine of **claim 12**, wherein the drive shaft rotates the blending tool at speeds in excess of 50 feet/second.
- 14) The blending machine of **claim 12**, wherein the drive shaft rotates the blending tool at speeds in excess of 95 feet/second.
- 15) The blending machine of **claim 12**, wherein the collision surface of the blending tool comprises a collision plate spaced apart and rigidly connected to the center shank of the blending tool during rotation of the tool.

- 16) A method of making toners, comprising
- (a) melt-mixing a mixture including toner resin and colorants;
  - (b) reducing the melt-mixture into particles; and
  - (c) adding surface additive particles to the mixture of melt-mixture particles; and
  - (d) blending the melt-mixture and surface additive particles in a blending machine using a rotating blending tool comprising a center shank, a collision surface having a collision profile, and a connector mechanism connecting the collision surface to the center shank, said connector mechanism being capable of connecting the collision surface to the center shank in different positions such that the collision profile of the collision surface varies with different positions of connection.
- 17) The method of **claim 16**, further comprising adjusting the collision profile of the blending tool by steps comprising:
- (a) loosening at least one connector mechanism;
  - (b) moving the collision surface to a different position; and
  - (c) retightening the connector mechanism while the collision surface is in the different position.
- 18) The method of **claim 16**, wherein the step of blending further comprises rotating the blending tool in excess of 50 ft./second.
- 19) The method of **claim 16**, wherein the step of blending further comprises rotating the blending tool in excess of 85 ft./second.
- 20) The method of **claim 16**, wherein the step of blending further comprises rotating the blending tool in excess of 95 feet/second.